



28/14
PATENT APPLICATION
Do. No. 9898-189

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re application of: Yoo-Sang Hwang and Su-Jin AHN

Serial No. 09/955,388 Examiner: Mai, Anh D
Filed: September 17, 2001 Group Art Unit: 2814
For: SEMICONDUCTOR DEVICE HAVING CONTACT PLUG AND METHOD
FOR MANUFACTURING THE SAME

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BOX NON FEE AMENDMENT
Assistant Commissioner for Patents,
Washington, D.C. 20231

Responsive to the Office Action dated July 2, 2002, enclosed is an amendment in the above-identified application.

The fee has been calculated as shown below.

CLAIMS AS AMENDED					
For:	Number After Amendment	Previous Number	Extra	Rate	Additional Fee
Total Claims	10	12	0	x \$18 =	\$0
Independent Claims	1	2	0	x \$84 =	\$0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0

*greater of twenty (20) or number for which fee has been paid

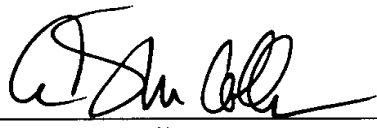
**greater of three (3) or number for which fee has been paid

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



20575
PATENT TRADEMARK OFFICE


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RESPONSE TO OFFICE ACTION

Responsive to the Office Action, dated July 2, 2002, please amend the application as follows.

IN THE CLAIMS

5. (Once amended) A method for manufacturing a semiconductor device comprising:
forming an insulating layer having a contact hole therethrough on a semiconductor substrate;
forming a diffusion barrier layer on a surface of the insulating layer and on surfaces within the contact hole; and
forming a contact plug in the contact hole by forming a first sub-plug that fills a lower portion of the contact hole and forming a second sub-plug that fills an upper portion of the contact hole on the first sub-plug,
wherein the first sub-plug fills a lower portion of the contact hole to a level substantially below a top surface of the insulating layer.

6. The method for manufacturing a semiconductor device of claim 5, wherein forming a first sub-plug comprises forming a first metal layer on the insulating layer having the contact hole therethrough and etching back the first metal layer to a predetermined depth to expose a void in the first metal layer, if any.